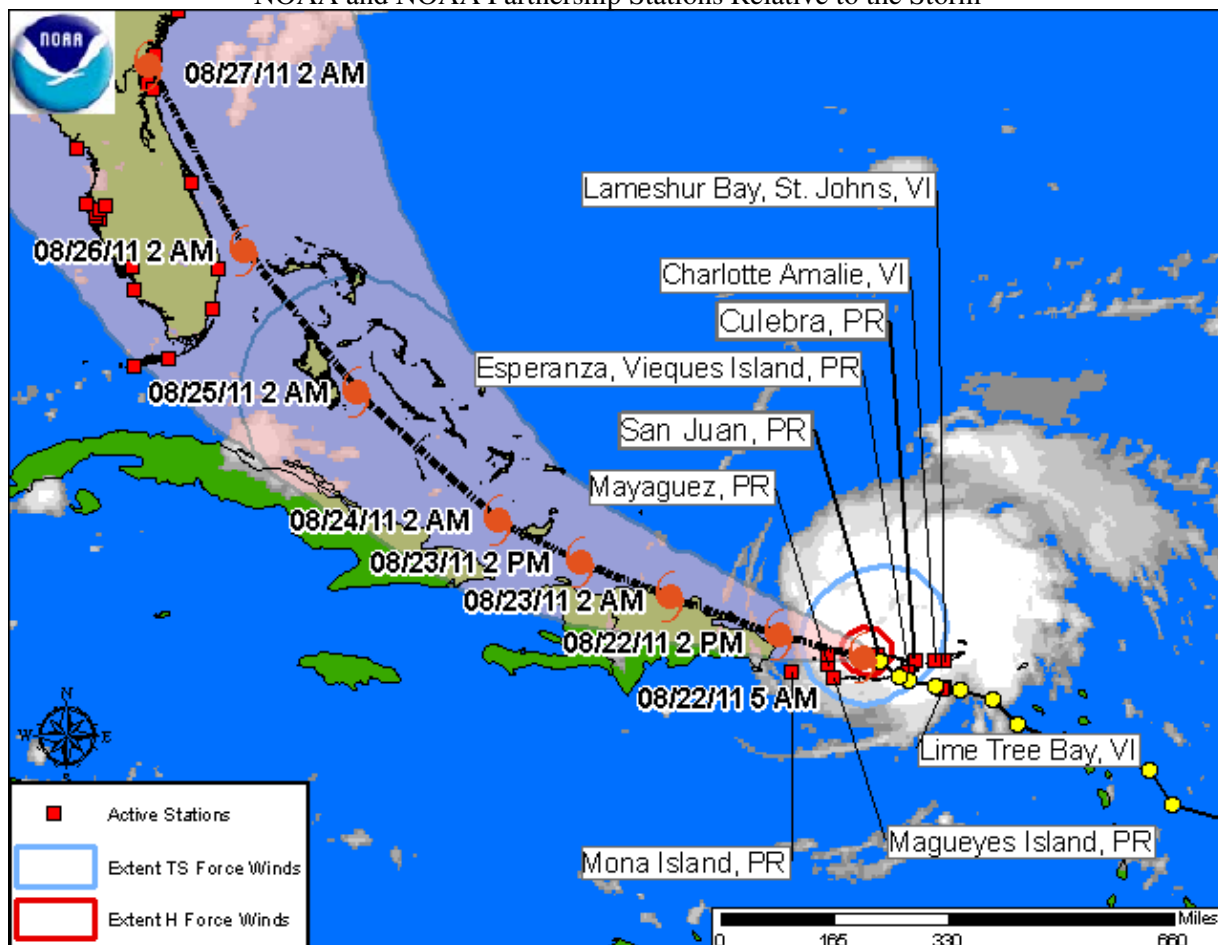




Hurricane IRENE QuickLook
Posted: 07:00 AST 08/22/2011

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/22/2011 07:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are rising and range between 0.24 and 0.72 feet above predicted. Winds are increasing as well and range between 15 and 30 kts with gusts over 40 kts at many locations. Earlier this evening, Esperanza, PR reported a wind gust of 65 kts. Barometric pressure continues to fall across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Culebra, PR: Next predicted high tides are 1.02 ft (0.31 m) at 08/22/2011 17:03 AST and 0.65 ft (0.20 m) at 08/23/2011 03:04 AST.

Esperanza, Vieques Island, PR: Next predicted high tides are 0.70 ft (0.21 m) at 08/22/2011 19:12 AST and 0.75 ft (0.23 m) at 08/23/2011 19:53 AST.

Hurricane IRENE QuickLook, POSTED 07:00 AST 08/22/2011

San Juan, PR: Next predicted high tides are 1.54 ft (0.47 m) at 08/22/2011 16:46 AST and 1.01 ft (0.31 m) at 08/23/2011 03:16AST.

Magueyes Island, PR: Next predicted high tides are 0.82 ft (0.25 m) at 08/22/2011 20:14 AST and 0.85 ft (0.27 m) at 08/23/2011 20:43 AST.

Mayaguez, PR: Next predicted high tides are 0.81 ft (0.25 m) at 08/22/2011 16:31 AST and 0.52 ft (0.16 m) at 08/23/2011 03:54 AST.

Mona Island, PR: Next predicted high tides are 0.85 ft (0.26 m) at 08/22/2011 21:23 AST and 0.89 ft (0.27 m) at 08/23/2011 22:04 AST.

Charlotte Amalie, VI: Next predicted high tides are 0.87 ft (0.27 m) at 08/22/2011 18:18 AST and 0.924ft (0.29 m) at 08/23/2011 19:02 AST.

Lameshur Bay, St. John, VI: Next predicted high tides are 0.78 ft (0.24 m) at 08/22/2011 17:48 AST and 0.83 ft (0.25 m) at 08/23/2011 18:52 AST.

Lime Tree Bay, VI: Next predicted high tides are 0.82 ft (0.25 m) at 08/22/2011 20:20 AST and 0.88 ft (0.27 m) at 08/23/2011 20:49 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see [Tidal Datums](#). For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst:MPM

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE IRENE ADVISORY NUMBER 7

500 AM AST MON AUG 22 2011

...IRENE STRENGTHENS OVER PUERTO RICO...BECOMING THE FIRST HURRICANE OF THE 2011 ATLANTIC SEASON...

WATCHES AND WARNINGS

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

* PUERTO RICO...VIEQUES...AND CULEBRA

A TROPICAL STORM WARNING IS IN EFFECT FOR...

* U.S. VIRGIN ISLANDS

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 AM AST..DATA FROM THE SAN JUAN FAA DOPPLER WEATHER RADAR INDICATE THAT THE CENTER OF HURRICANE IRENE WAS LOCATED ALONG THE NORTH COAST OF PUERTO RICO NEAR LATITUDE 18.4 NORTH...LONGITUDE 66.4 WEST ABOUT 25 MI W OF SAN JUAN PUERTO RICO. IRENE IS MOVING TOWARD THE WEST-NORTHWEST NEAR 12 MPH. THIS GENERAL MOTION IS EXPECTED TO CONTINUE FOR THE NEXT COUPLE OF DAYS. ON THE FORECAST TRACK THE CENTER OF IRENE WILL MOVE OFF THE NORTH COAST OF PUERTO RICO THIS MORNING...AND MOVE NEAR OR OVER THE NORTHERN COASTAL REGIONS OF THE DOMINICAN REPUBLIC THIS AFTERNOON AND TONIGHT.

MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 75 MPH.WITH HIGHER GUSTS. IRENE IS A CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. SOME STRENGTHENING IS FORECAST DURING THE NEXT 48 HOURS.

HURRICANE-FORCE WINDS EXTEND OUTWARD UP TO 15 MILES FROM THE CENTER...AND TROPICAL-STORM-FORCE WINDS EXTEND OUTWARD UP TO 150 MILES MAINLY NORTHWEST AND NORTHEAST OF THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 987 MB...29.15 INCHES.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE OCCURRING IN THE VIRGIN ISLANDS...EASTERN PUERTO RICO...CULEBRA AND VIEQUES...AND WILL CONTINUE TO SPREAD ACROSS PUERTO RICO THIS MORNING. TROPICAL STORM CONDITIONS WILL REACH THE DOMINICAN REPUBLIC BY THIS AFTERNOON. HURRICANE CONDITIONS ARE EXPECTED OVER PUERTO RICO...VIEQUES...AND CULEBRA THIS MORNING...AND OVER THE NORTHERN PORTIONS OF THE DOMINICAN REPUBLIC MONDAY AFTERNOON AND EVENING. THE HIGHEST WINDS ARE LIKELY TO OCCUR OVER AREAS OF ELEVATED TERRAIN. TROPICAL STORM CONDITIONS ARE EXPECTED TO REACH THE SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS TUESDAY...AND ARE POSSIBLE IN THE CENTRAL BAHAMAS BY LATE TUESDAY. HURRICANE CONDITIONS ARE POSSIBLE IN THE CENTRAL BAHAMAS BY TUESDAY NIGHT.

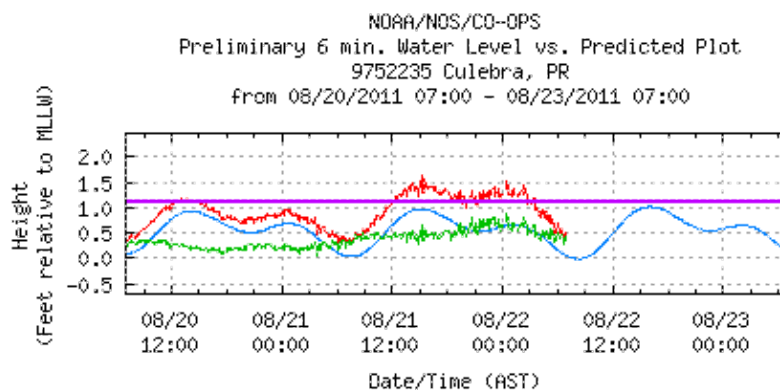
STORM SURGE...A STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE NORMAL TIDE LEVELS ALONG THE ENTIRE COAST OF THE DOMINICAN REPUBLIC. A STORM SURGE OF 1 TO 3 FEET ABOVE NORMAL TIDE LEVELS IS EXPECTED ALONG THE COAST OF PUERTO RICO...AS WELL AS IN THE REMAINDER OF THE TROPICAL STORM WARNING AREA. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES.

FORECASTER STEWART

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [San Juan - Water Level](#), [San Juan - Winds](#), [San Juan - Barometric](#), [Magueyes Island - Water Level](#), [Magueyes Island - Winds](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Mona Island - Water Level](#), [Charlotte Amalie - Water Level](#), [Lameshur Bay, St. John - Water Level](#), [Lime Tree Bay - Water Level](#), [Lime Tree Bay - Winds](#),

[Culebra, PR - Return to List](#)

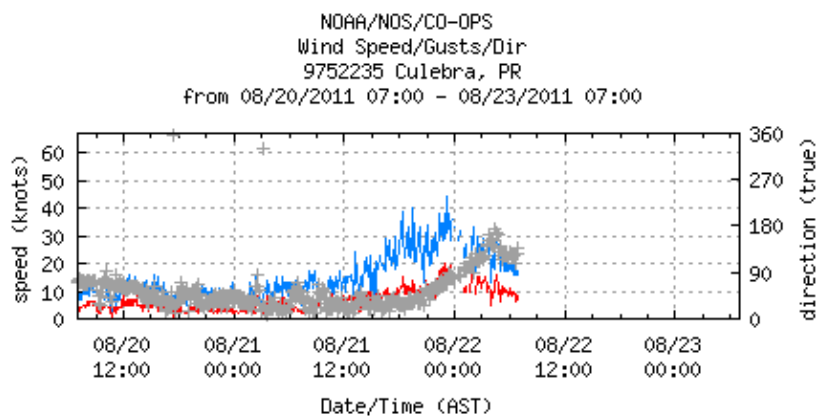


Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: **Observed: 0.41 ft.** **Predicted: 0.06 ft.** **Residual: 0.35 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.85 ft. above MHHW

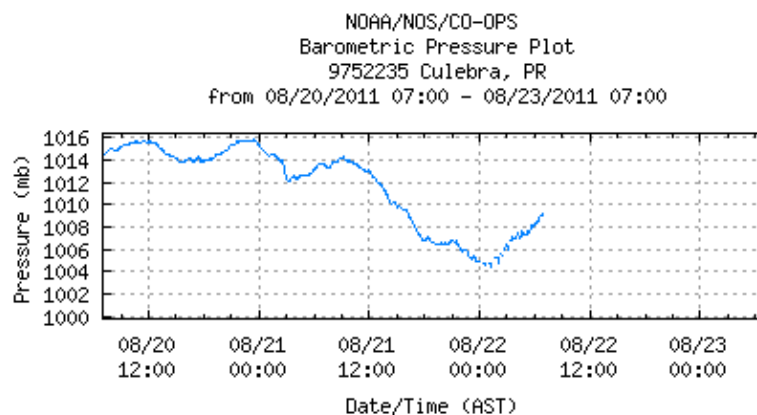
[Culebra, PR - Return to List](#)



Last Observed Sample: 08/22/2011 06:54 (AST)

Wind Speed: 7 knots **Gusts: 16 knots** Direction: 128° T

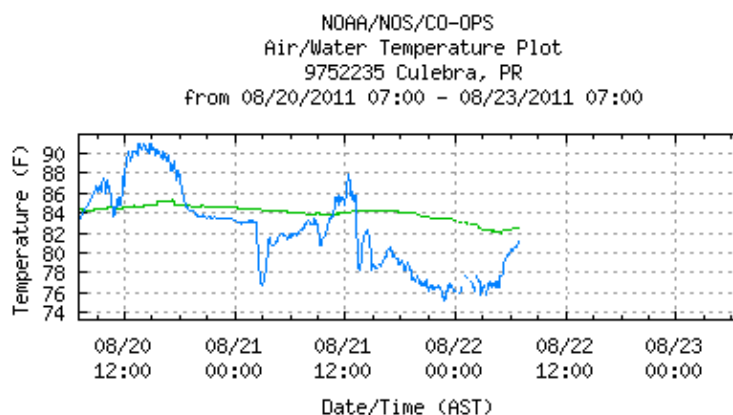
[Culebra, PR - Return to List](#)



Last Observed Sample: 08/22/2011 06:54 (AST)

Barometric Pressure: 1009.2 mb

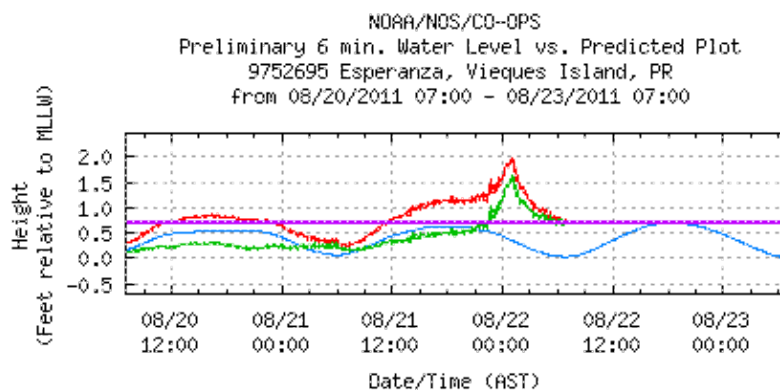
[Culebra, PR - Return to List](#)



Last Observed Sample: 08/22/2011 06:54 (AST)

Water Temperature: 82.6° F Air Temperature: 81.0° F

Esperanza, Vieques Island, PR - Return to List



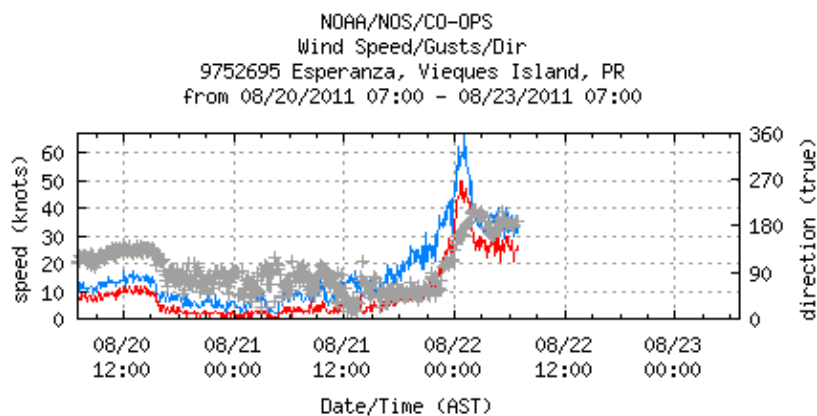
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: **Observed: 0.73 ft.** **Predicted: 0.03 ft.** **Residual: 0.70 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.84 ft. above MHHW

Esperanza, Vieques Island, PR - Return to List

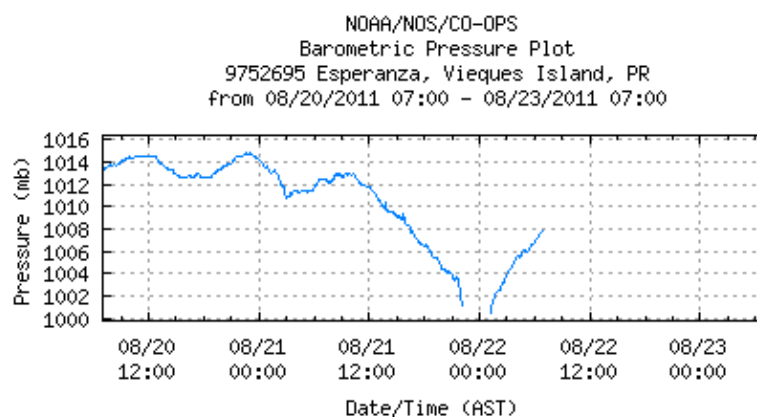


speed — gusts — direction +

Last Observed Sample: 08/22/2011 06:54 (AST)

Wind Speed: 26 knots **Gusts: 31 knots** **Direction: 189° T**

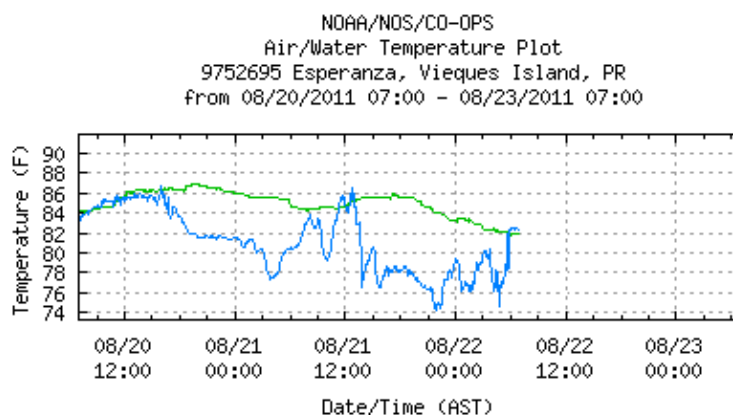
[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 08/22/2011 06:54 (AST)

Barometric Pressure: 1007.9 mb

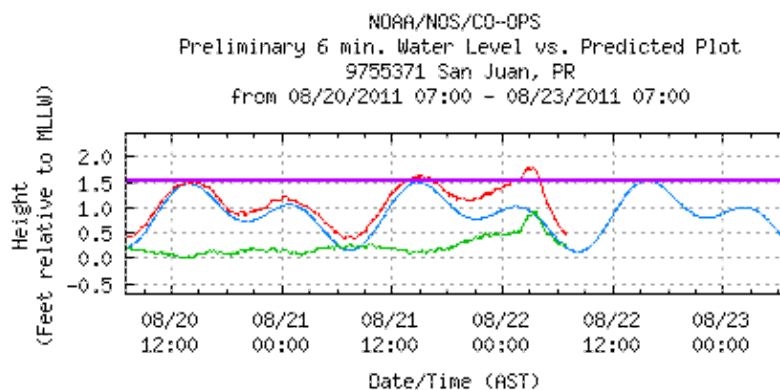
[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 08/22/2011 06:54 (AST)

Water Temperature: 81.9° F Air Temperature: 82.4° F

San Juan, PR - Return to List



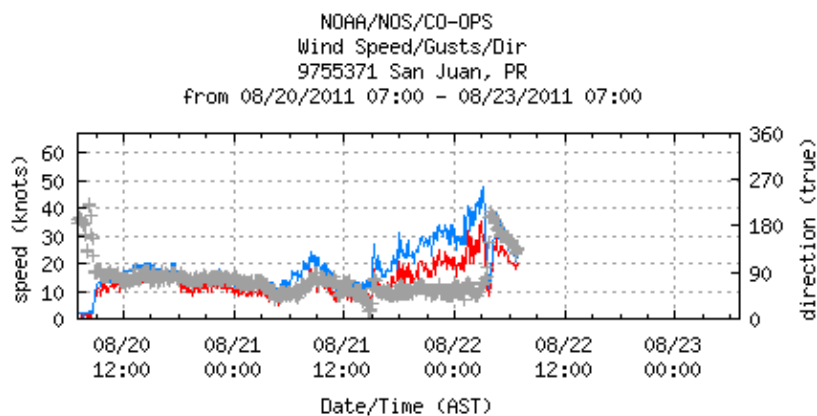
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: **Observed: 0.48 ft.** **Predicted: 0.22 ft.** **Residual: 0.26 ft.**

Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above MHHW

San Juan, PR - Return to List

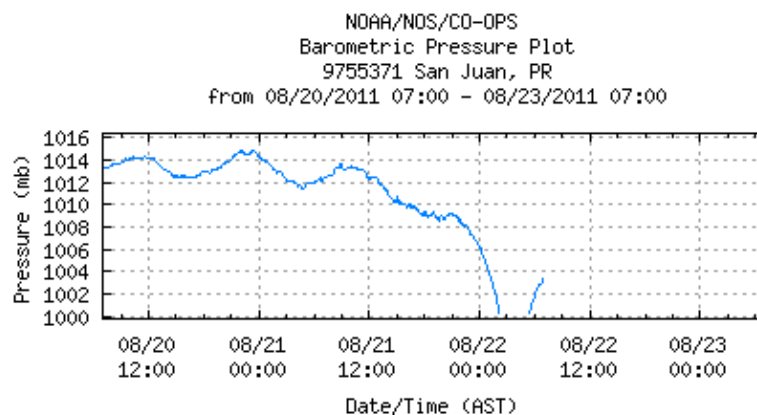


speed — gusts — direction +

Last Observed Sample: 08/22/2011 06:54 (AST)

Wind Speed: 20 knots **Gusts: 24 knots** **Direction: 138° T**

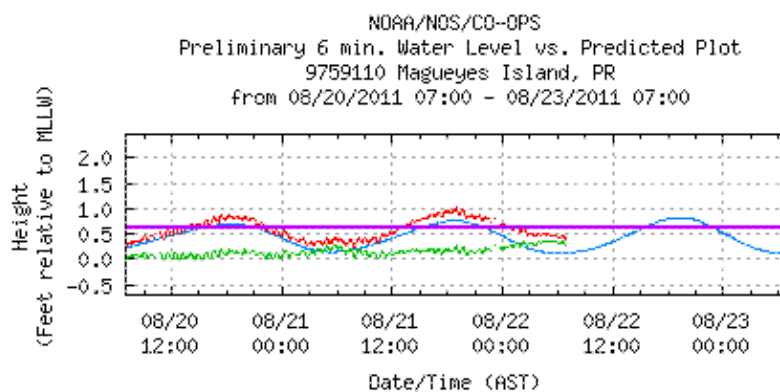
San Juan, PR - Return to List



Last Observed Sample: 08/22/2011 06:54 (AST)

Barometric Pressure: 1003.4 mb

Magueyes Island, PR - Return to List

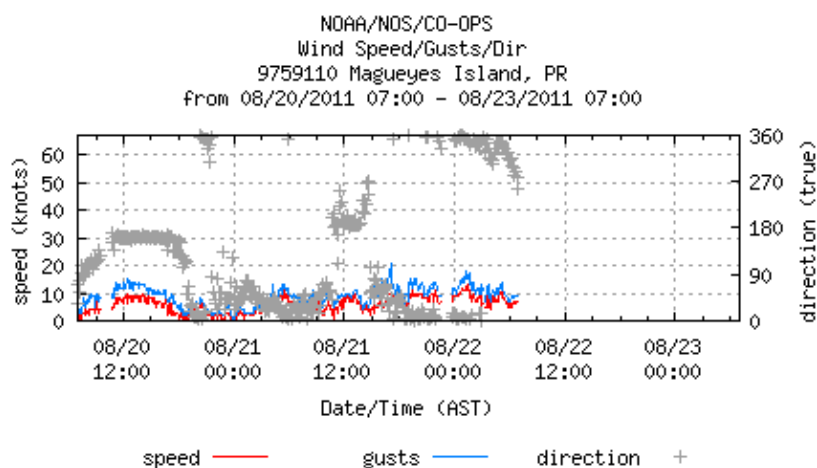


Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: Observed: 0.39 ft. Predicted: 0.12 ft. Residual: 0.27 ft.

Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

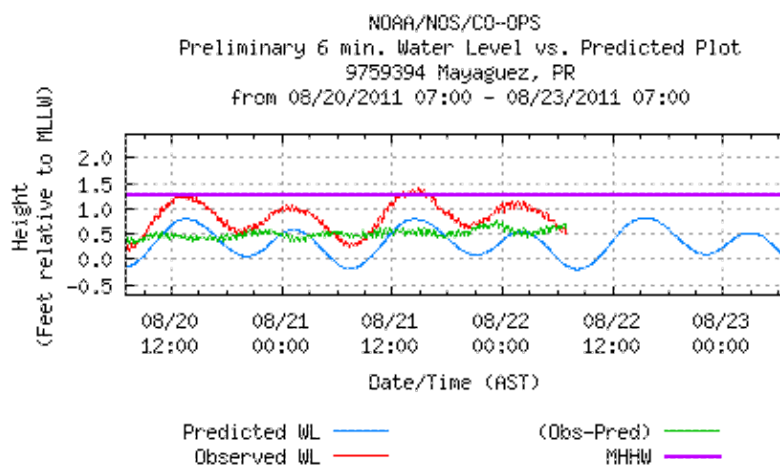
Magueyes Island, PR - Return to List



Last Observed Sample: 08/22/2011 06:54 (AST)

Wind Speed: 7 knots Gusts: 9 knots Direction: 256° T

Mayaguez, PR - Return to List

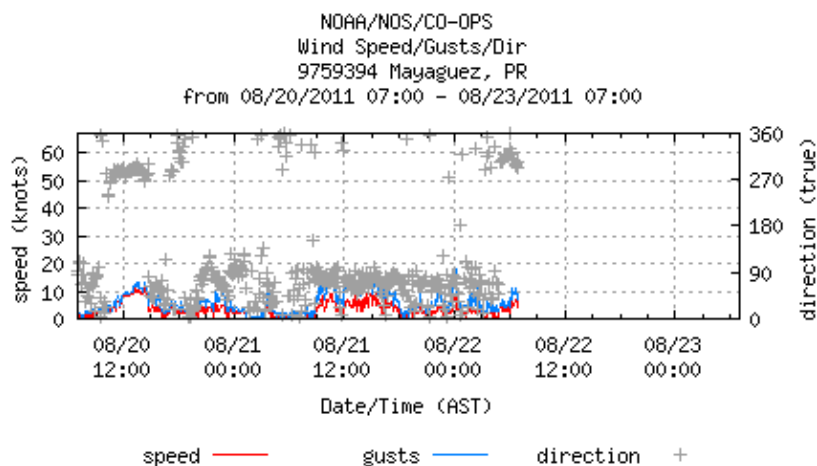


Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: Observed: 0.51 ft. Predicted: -0.12 ft. Residual: 0.63 ft.

Historical Maximum Water Level: , 0 ft. above MHHW

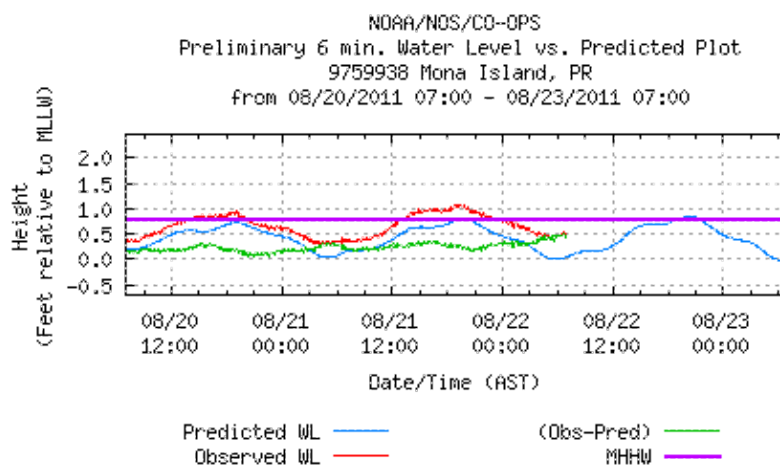
Mayaguez, PR - Return to List



Last Observed Sample: 08/22/2011 06:54 (AST)

Wind Speed: 4 knots Gusts: 7 knots Direction: 295° T

Mona Island, PR - Return to List

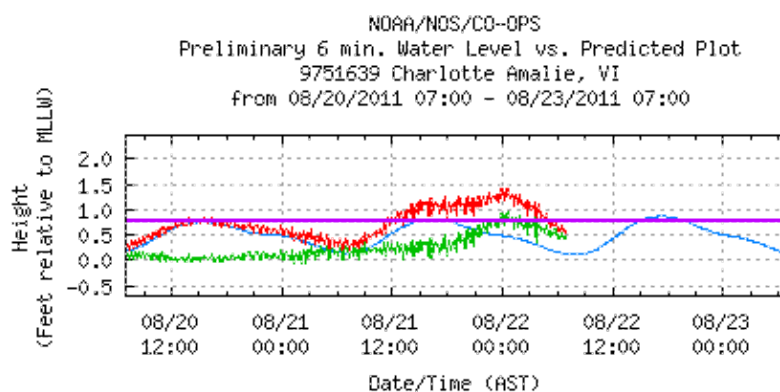


Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: Observed: 0.50 ft. Predicted: 0.04 ft. Residual: 0.46 ft.

Historical Maximum Water Level: Dec 23 2010, 1.26 ft. above MHHW

Charlotte Amalie, VI - Return to List



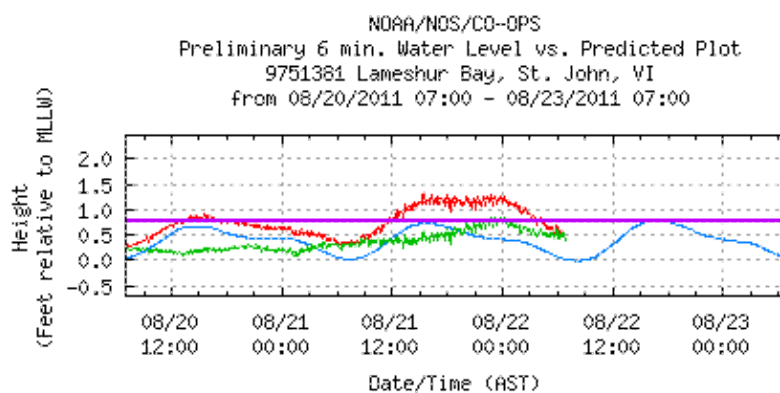
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: **Observed: 0.58 ft. Predicted: 0.12 ft. Residual: 0.46 ft.**

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

Lameshur Bay, St. John, VI - Return to List



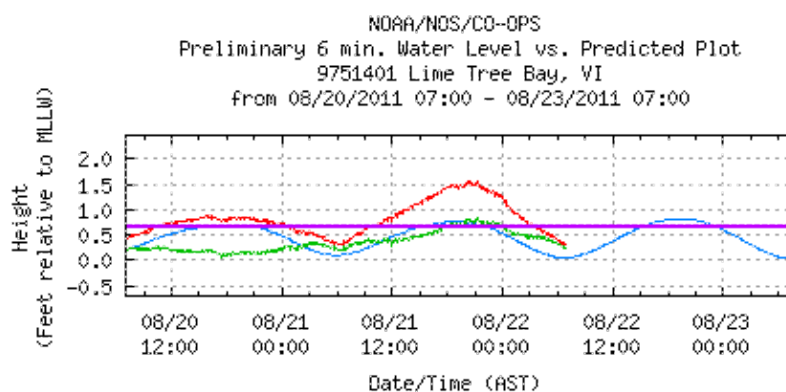
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: **Observed: 0.42 ft. Predicted: 0.02 ft. Residual: 0.40 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

Lime Tree Bay, VI - Return to List



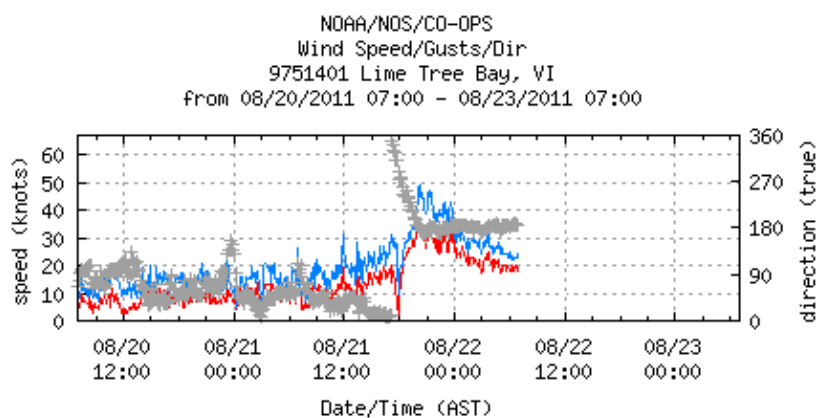
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/22/2011 06:54 (AST)

Relative to MLLW: **Observed: 0.30 ft.** **Predicted: 0.06 ft.** **Residual: 0.24 ft.**

Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

Lime Tree Bay, VI - Return to List



speed — gusts — direction +

Last Observed Sample: 08/22/2011 06:54 (AST)

Wind Speed: 18 knots **Gusts: 24 knots** **Direction: 184° T**

Hurricane IRENE QuickLook, POSTED 07:00 AST 08/22/2011

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce